## DESCRIPTION OF MORUM PRÆCLARUM, SP. NOV., WITH REMARKS ON THE RECENT SPECIES OF THE GENUS. By JAMES COSMO MELVILL, M.A., D.Sc.

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MORUM PRÆCLARUM, n.sp.

M. TESTA ovata, paullum compressa, solidiuseula, albo-carnea, ochrobrunneo suffusa et trizonata, anfractibus ad 7, quorum 4 nucleares albofusci, minute granati, gradatuli, duo his proximi parvi, depresso-tornati, squamose cancellati, ultimo longitudinaliter acute costato, costis 10 fortibus, regulariter imbricatoechinatis, ad peripheriam fere spinosis, juxta suturas et infra tribus zonis castaneis decorato, et circa basim eodem colore omnino suffuso, interstitiali superficie pulchre pallide carneolata; apertura angusta, flexuosa, labro extus incrassato, albo, intus dentibus vel plicis 12

prædito, columella callosa, expansa, alba, granulis rotundis vel oblongis copiose decorata, canali attenuato, recurvo.

Long. 40, lat. 27 mm.

Hab.-?

This interesting shell was in the collection of the late Mr. J. J. Macandrew, of Ivybridge, Devon; and his wife having generously offered portions of his collection for sale for the benefit of the Red Cross funds, I took the opportunity not only of obtaining this *Oniscidia*, but likewise the original type of *M. macandrewi*, Sow., which differs from it in form, coloration, and other particulars. *M. præclarum*, indeed, seems nearest to *exquisitum*, Ad. & Reeve, but that species is longer in proportion to its breadth, with more rounded costæ, and with the labral and columellar areas beautifully suffused with pale earnation tint. The much narrowed canal, markedly recurved at the base, of our species is also a marked characteristic.

Since the names proposed in 1798 by J. F. Bolten are now adopted, *Morum* must replace both *Lambidium*, 1807, and *Oniscia*, Sow., 1824.

Dall's exhaustive review of this subject (Professional Paper U.S. Geol. Surv., No. 59, 1909, pp. 67, 68) is based on the study of the various fossil forms of the genus, which seems to appear first in the Eocene formation at Vincentin and Monte Ilario (*Oniscia antiqua*, Bayan), all in the Italian Tertiary.

In America, according to Dr. Dall, the Lower Oligocene at Vicksburg, Missouri, contains the earliest known form, viz. *M. (Oniscidia)* harpulum, Conrad. In the same strata at St. Domingo, W.I., occurs *M. (Herculea) domingense*, Sowerby.

The Upper Cretaceous beds of South India provide *M. constellatum*, Stoliczka, a small species with elevated spire, which, from the description, might be allied nearly to the recent *M strombiforme*, Reeve.



The known recent species, which are but ten in number, with two marked varieties, are as follows:---

### MORUM, Bolten, 1798.

- Morum, J. F. Bolten, Mus. Boltenianum, 1798, p. 53. Type, M. purpureum, Bolt. = Strombus oniscus (L.), Gmelin.
- Lambidium, Link., Beschreib. Natural.-Samml. Univ. Rostock, 1807, p. 112.

Oniscia, Sowerby, Genera Shells, gen. xxiv, 1824.

Oniscidia, Sowerby, Malac., 1840, p. 299. Type, O. cancellata, Sow.

Ersina, Gray, "Syn. Brit. Mus., 1840"; Gray, Proc. Zool. Soc. Lond., xv, 1847, p. 137.

Herculea, Hanley, in H. & A. Adams, Gen. Recent Moll., ii, 1858, p. 621. Type, O. ponderosa, Hanley.

Plesioniscia, P. Fischer, Man. de Conch., 1884, p. 660. Type, O. tuberculosa, Sow.

§ PLESIONISCIA, P. Fischer, 1884.

1. Morum tuberculosum, Sow.

Oniscia tuberculosa, G. B. Sowerby (first of the name), Gen. Shells,

1824.

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Reeve, Conch. Icon., v, Aug. 1849, pl. i, figs. 5, 6.

#### Var. xanthostoma, A. Adams.

Oniscia xanthostoma, A. Adams, Proc. Zool. Soc. Lond., 1853, p. 174. ,, tuberculosa, Reeve, l.c., fig. 5a.

Hab.-Gulf of California and Gallapagos Isles (the variety).

I can see no structural difference in *xanthostoma*; simply a brilliant colour variety with yellow-orange lip, columellar area, and interior of aperture. The section *Plesioniscia* was never properly characterized by Paul Fischer.

2. Morum oniscus (Linn.).

Strombus oniscus, L., Syst. Nat., 12th ed., 1767, p. 1210.

Morum purpureum, Bolten, Mus. Bolt., 1798, p. 53.

,, oniscus, H. & A. Adams, Gen. Recent Moll., i, 1853, p. 219.

Oniscia oniscus, Reeve, Conch Icon., v, pl. i, fig. 1.

*Hab.*—Jamaica and other West Indian Islands. Florida Keys (H. Hemphill) and others. I myself found it abundantly at Key West, upon the coral reefs to the south of the island, in March-April, 1872.

# Var. lamarckii, Desh.

Oniscia lamarckii, Deshayes, Anim. s. Vert., x, 1844, p. 12.

,, oniscus, Reeve, Conch. Icon., v, Aug. 1849, fig. 1.

Seems only to differ from the normal form in the pale-pink lip and columellar area. The shell is usually slightly larger, and has a more "finished" appearance. This must not be confounded with the *O. lamarckii*, Lesson, which is an unidentified species. 3. Morum strombiforme (Rve.).

Oniscia strombiformis, Reeve, Proc. Zool. Soc. Lond., 1842, p. 91.

,, ,, Reeve, Conch. System, ii, 1842, p. 210, pl. ccliii, fig. 1.

Hab.—Honduras. Doubtfully distinct from No. 2, but differing in the sculpture of the body-whorl and the turreted spire. It is also much smaller.

§§ HERCULEA, Hanley, 1858.

4. Morum ponderosum, Hanley.

Oniscia ponderosa, Hanley, Proc. Zool. Soc. Lond., 1858, p. 228, pl. xlii, figs. 9, 10.

Morum ponderosa, H. & A. Adams, Gen. Recent Moll., ii, 1858, p. 621. Hab.—Japan (Stearns).

A fine and very distinct species, the columellar area suffused often with pink, and otherwise variegated with brown streaked painting. Small papillæ present on the columellar area. As the name implies, it is a massive shell, proportionately speaking, the ribs blunt and rounded, rather after the fashion of *M. oniscus* (L.). There is a deep sulcation posteriorly. In general form this species, separated by Hanley because of the above-mentioned sulcus, serves to unite typical *Morum* with *Oniscidia*.

§§§ ONISCIDIA, G. B. Sowerby, 1824.

5. Morum præclarum, Melvill.

Vide supra.

6. Morum cithara (Wats.).

Oniscia cithara, Boog Watson, Journ. Linn. Soc. Lond. (Zool.), xv, p. 266.

,, ,, Report H.M.S. Challenger, Zoology, xv, 1886, p. 410, pl. xxxiv, fig. 6.

Hab. - Station 192. September 20th, 1874. Lat. 5° 49' 15" S., long. 132° 14' 15" E. Ki Islands, west of Papua, 140 fathoms, blue mud. The unique type in the British Museum is not quite adult.

The ribs are 17, close, echinate-spinulose, the penultimate whorl also bearing a coronal of short, regular spines. Allied to cancellatum, Sow.

## 7. M. grande (A. Ad.).

Oniscia grandis, A. Adams, Proc. Zool. Soc. Lond., 1853, p. 185.

,, cancellata, Sow., Reeve, Conch. Icon., v, Aug. 1849, pl. i, fig. 4. Hab.—China.

Much larger in all its parts than the very similar cancellatum; indeed, Reeve has figured this species under that name. This was at all events Mr. Edgar Smith's fixed opinion—and that specimen, being from the Cumingian Collection, is, doubtless, in the British Museum. I have a very fine example, formerly in Mr. J. J. Macandrew's possession,  $75 \times 40$  mm. Its principal points of distinction seem to lie in its size, more frequent longitudinal costæ, being 18 against 12 in its smaller ally, special ridges thicker and more markedly imbricate, columellar area more porcellanous in consistency, and shining white, papillæ not so numerous and close. The spire, too, is more pronounced, whorls, including the nuclear, 9 as against 7.

8. Morum cancellatum (Sow.).

Oniscidia cancellata, G. B. Sowerby (first of the name), Gen. Shells, figs. 1-3, 1824.

Oniscia cancellata, Sow., Reeve, Conch. Icon., v, 1849, fig. 5 (letterpress).

Hab.—China.

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A common species, constituting the type of the section Oniscidia, Sow. It is probable that both *M. cithara*, Wats., and grande, A. Ad., may, in the future, be subjected to its synonymy; but in the absence of close intermediates it is best for the present to keep them separate.

9. Morum exquisitum (Ad. & Rve.).

Oniscia exquisita, Adams & Reeve, Voy. Samarang, 1850, p. 35, pl. v, figs. 3a-b.

Reeve, Conch. Icon., v, Aug. 1849, pl. i, fig. 3.

Hab.—Sooloo Archipelago, outside a coral-reef, in sandy mud, at 16-20 fathoms (Sir E. Belcher), Philippine Isles (Hidalgo), Japan (Hirase), Saya de Malha Banks, S. Indian Ocean (J. Stanley Gardiner).

The beautiful pale-pink lip and columellar area, conspicuously dotted with small white papillæ, teeth of the outer lip white, the margin being thrice spotted with brown maculation, ribs with rounded tubercular ridges, not echinate, contour ovate, characterize this rare species. The type was figured by Reeve from the Dennison Collection, at which sale in 1865 it fetched a high price. I do not know where this actual specimen may be at the present time. The example from Sava de Malha is in the British Museum.

10. Morum dennisoni (Reeve).

Oniscia dennisoni, Reeve, Proc. Zool. Soc. Lond., 1842, p. 21.

,, ,, Conch. System, ii, 1842, p. 211, pl. ccliii, figs. 5, 6.

,, Conch. Icon., v, Aug. 1849, pl. i, fig. 6.

Hab.—Reported from Guadeloupe, but most probably an Eastern species. Type in Mus. Brit.?

This, the most striking in both form and coloration of all the recent species of *Morum*, has gained a reputation as one of the rarest and most select of all Mollusca. From the last-named (*exquisitum*) it differs in many particulars, notably in its oblong contour, echinulate ribs, and the brilliant orange suffusion of outer lip and columellar area, the small white papillie showing more plainly by contrast with the ground colour.

Fifty-four years ago, towards the end of April, 1865, the six days' sale of the great conchological stores of the late Mr. John Dennison, of Liverpool, took place at Stevens' Auction Rooms. The specimen in the British Museum is, I presume, one of the two specimens then sold; what I believe to have been the other was offered by auction at Deventer, Holland, in July, 1876, at the sale of the Roeters van Lennep Collection, but I am ignorant of its destination.

It has been reported as dredged off Guadeloupe in recent years by M. Beau, but this needs confirmatiou.